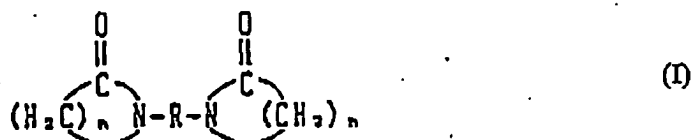


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**Amendments To The Claims:**

1. (Currently Amended) A medical device formed from a thermoplastic polymer composition, wherein the polymer composition is ~~a melt mixture~~ the reaction product of a melt mixture comprising
  - a) at least one terminally reactive polymer, and
  - b) a chain extender.
2. (original) A medical device as in claim 1 wherein the terminally reactive polymer has at least one terminal active hydrogen and/or carboxylic acid group thereon.
3. (original) A medical device as in claim 1 wherein the terminally reactive polymer is selected from the group consisting of polyesters; polyamides; polyurethanes; block copolymers incorporating a polyester, polyamide, polyurethane and/or polyether segment.
4. (original) A medical device as in claim 3 wherein the polymer composition further comprises a polymer selected from the group consisting of polyolefins, poly(meth)acrylate esters, silicones, and organic rubbers.
5. (original) A medical device as in claim 1 wherein the chain extender comprises a bis-lactam compound.
6. (original) A medical device as in claim 5 wherein the bis-lactam compound is represented by the following general formula (I):

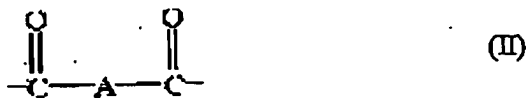


in which one or more of the methylene hydrogen atoms thereof may optionally be substituted by an alkyl or aryl radical; R represents a divalent organic radical; and n is an integer of 2 - 15.

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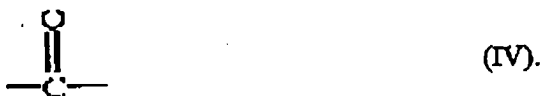
7. (original) A medical device as in claim 6 wherein R is a group of formula (II), (III) or (IV):



where A is a divalent hydrocarbon group, which is optionally interrupted by one or more ether oxygen atoms;



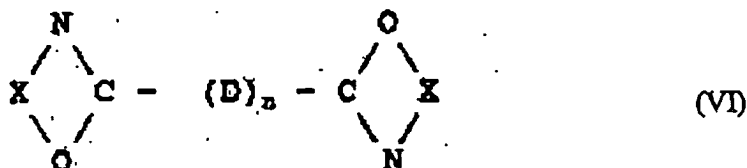
where B is -NH-A-NH, and A is as defined for formula II; and



8. (Currently Amended) A medical device as in claim 5 wherein the bis-lactam compound is employed in said melt mixture ~~product~~ in an amount of from about 0.1 % to about 5% by weight of the terminally reactive polymer.
9. (original) A medical device as in claim 5 wherein the bis-lactam compound is a member selected from the group consisting of N,N'-isophthaloyl bis-caprolactam, N,N'-adipoyl bis-caprolactam, N,N'-terephthaloyl bis-lauro lactam, N,N'-isophthaloyl bis-butyrolactam, carbonyl bis-caprolactam and mixtures thereof.

10. (original) A medical device as in claim 1 wherein the chain extender comprises a bis-oxazoline and/or bis-oxazine compound.

11. (original) A medical device as in claim 10 wherein the bis-oxazoline and/or bis-oxazine compound is represented by the formula (VI):



where X is a divalent hydrocarbon group and the rings thereof are 5-membered rings for the bisoxazoline or 6-membered rings for the bisoxazine, respectively;  $n = 0$  or  $1$ ; and D is a divalent organic group.

12. (original) A medical device as in claim 10 wherein the bisoxazoline and/or bisoxazine compound is a member selected from the group consisting of 2,2'-bis(2-oxazoline), 2,2-bis(4-methyl-2-oxazoline), 2,2'-bis(4-phenyl-2-oxazoline), 2,2'-bis(4-hexyloxazoline), 2,2'-p-phenylene bis(2-oxazoline), 2,2'-m-phenylene bis(2-oxazoline), 2,2'-tetramethylene bis(4,4'-dimethyl-2-oxazoline), 2,2'-bis(2-oxazine), 2,2-bis(4-methyl-2-oxazine), 2,2'-bis(4-phenyl-2-oxazine), 2,2'-bis(4-hexyloxazine), 2,2'-p-phenylene bis(2-oxazine), 2,2'-m-phenylene bis(2-oxazine), 2,2'-tetramethylene bis(4,4'-dimethyl-2-oxazine) and mixtures thereof.

13. (Currently Amended) A medical device as in claim 10 wherein the bis-oxazoline and/or bis-oxazine compound is employed in said melt mixture product in an amount of from about 0.1 % to about 4% by weight of the terminally reactive polymer.

14. (Cancelled)

15. (original) A medical device as in claim 1 wherein the device is a catheter or a catheter balloon.

16. (Currently Amended) A medical device as in claim 1 wherein the chain extender is incorporated into said melt mixture product in an amount which increases polymer molecular weight but does not substantially promote or induce crosslinking.

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17. (Currently Amended) A method of preparing a medical device balloon comprising extruding a polymer composition to form tubing and blowing a segment of the tubing to form the balloon, wherein the polymer composition is ~~a melt mixture~~ the reaction product of a melt mixture comprising

- a) at least one terminally reactive polymer and
- b) a chain extender.

18. (original) A method as in claim 17 wherein the terminally reactive polymer has at least one terminal active hydrogen and/or carboxylic acid group thereon.

19. (original) A method as in claim 17 wherein the terminally reactive polymer is selected from the group consisting of polyesters; polyamides; polyurethanes; block copolymers incorporating a polyester, polyamide, polyurethane and/or polyether segment.

20. (original) A method as in claim 19 wherein the polymer composition further comprises a polymer selected from the group consisting of polyolefins, poly(meth)acrylate esters, silicones, and organic rubbers.

21. (original) A method as in claim 17 wherein the chain extender comprises a bis-lactam compound.

22. (Currently Amended) A method as in claim 21 wherein the bis-lactam compound is employed in said melt mixture ~~product~~ in an amount of from about 0.1 % to about 5% by weight of the terminally reactive polymer.

23. (original) A method as in claim 21 wherein the bis-lactam compound is a member selected from the group consisting of N,N'-isophthaloyl bis-caprolactam, N,N'-adipoyl bis-caprolactam, N,N'-terephthaloyl bis-lauro lactam, N,N'-isophthaloyl bis-butyrolactam, carbonyl bis-caprolactam and mixtures thereof.

24. (original) A method as in claim 17 wherein the chain extender comprises a bis-oxazoline and/or bis-oxazine compound.

25. (original) A method as in claim 24 wherein the bisoxazoline and/or bisoxazine compound is a member selected from the group consisting of 2,2'-bis(2-oxazoline), 2,2'-bis(4-methyl-2-oxazoline), 2,2'-bis(4-phenyl-2-oxazoline), 2,2'-bis(4-hexyloxazoline), 2,2'-p-phenylene bis(2-oxazoline), 2,2'-m-phenylene bis(2-oxazoline), 2,2'-tetramethylene

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bis(4,4'-dimethyl-2-oxazoline) 2,2'-bis(2-oxazine), 2,2-bis(4-methyl-2-oxazine), 2,2'-bis(4-phenyl-2-oxazine), 2,2'-bis(4-hexyloxazine), 2,2'-p-phenylene bis(2-oxazine), 2,2'-m-phenylene bis(2-oxazine), 2,2'-tetramethylene bis(4,4'-dimethyl-2-oxazine) and mixtures thereof.

26. (Currently Amended) A method as in claim 24 wherein the bis-oxazoline and/or bis-oxazine compound is employed in said melt mixture ~~product~~ in an amount of from about 0.1% to about 4% by weight of the terminally reactive polymer.

27. (Currently Amended) A method as in claim 17 wherein the chain extender is incorporated into said melt mixture ~~product~~ in an amount which increases polymer molecular weight but does not substantially promote or induce crosslinking.

28. (cancelled)

29. (Currently Amended) A method of preparing a medical device comprising forming at least a portion of the device from a thermoplastic polymer composition, wherein the polymer composition is ~~a melt mixture~~ the reaction product of a melt mixture comprising

- a) at least one terminally reactive polymer, and
- b) a chain extender.

30. (original) A method as in claim 29 wherein the terminally reactive polymer has at least one active hydrogen and/or carboxylic acid group thereon.

31. (original) A method as in claim 29 wherein said step of forming at least a portion of the device from a thermoplastic polymer composition comprises extruding a tube of said polymer composition.

32. (original) A method as in claim 31 wherein the medical device is a catheter or a balloon.

33. (original) A method as in claim 29 wherein the medical device is a balloon, the method further comprising blowing a segment of the extruded tube at an elevated temperature and pressure to form the balloon.

~~32~~ 34. (Currently Amended) A method as in claim 29 wherein the chain extender is incorporated into said melt mixture ~~product~~ in an amount which increases polymer molecular weight but does not substantially promote or induce crosslinking.

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~~33~~ 35. (Currently Amended) A method as in claim 31 wherein said tubing is extruded from an extruder and said melt mixture ~~product~~ is prepared in the extruder.

~~34~~ 36. (Currently Amended) A method claim 17 wherein said tubing is extruded from an extruder and said melt mixture ~~product~~ is prepared in the extruder.